

Preparing for the Next Fight
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The U.S. Military has the tendency to focus its training on achieving success in the conflict currently being fought, not for the fight that lies in the future. This mentality leaves the military vulnerable to losing the tactical edge it needs to combat a future threat. Fighting and winning against the enemy of tomorrow requires the capability to train effectively today.

When the Marine Air-Ground Task Force begins shaping operations at the outset of the next war, Hornet aircrew will be among the first Marines to go into combat to meet the adversary from the air. These aviators must be confident with their aircraft, fully proficient, and prepared for the missions they will fly. However, to prepare the Hornet community for the "next fight," the Marine Corps must correct deficiencies in squadron manning, aircraft inventory, and unrealistic training.

Squadron Manning

Company grade officers represent the pilot training core of Marine Fighter Attack Squadrons; the mid-grade and senior captains are directly responsible for the mentoring and tactical development of lieutenants and junior captains. According to the *2007 Marine Aviation Plan*, "company grade inventories of aviators are below desired

levels,"¹ leaving a training and leadership vacuum within the cadre of company grade pilots.

Although the Global War on Terror (GWOT) has taken a greater toll on rotary-wing aviators in the form of frequent deployments and less dwell time,² it has taken a different toll on Hornet aircrew by shortening their squadron tour to less than three years. Multiple factors have taken these aviators out of the cockpit too soon: The GWOT's need for individual augment (IA) billets on joint, COCOM, and wing staffs; personnel for transition teams; and aviators for forward air controller (FAC) tours.

The majority of the aviators pulled early from the squadron are mid-grade and senior captains, the squadron trainers. Furthermore, these aviators have logged approximately 500 hours in the Hornet and are at the point in their careers when they begin to earn advanced flight qualifications.³ When they leave the squadron early to fulfill the needs of the Marine Corps, these aviators lose the opportunity to attain these qualifications; they also lose the proficiency with the mission skills they have worked to achieve for the past two years.

¹ Deputy Commandant for Aviation, *2007 Marine Aviation Plan*, June 2007, 3-3.

² Robert S. Walsh, *Marine Aviation Update*, October 24, 2007, slide 6.

³ Peter N. Lee, "Retaining Our Fixed-wing Pilots," *Marine Corps Gazette*, May 1, 2000, 63.

Though the need for augmented personnel is real, Marine Corps leadership must understand that individual pilot proficiency and Hornet community readiness will be negatively impacted for a future fight. A greater number of second-tour aviators will return to squadrons, as senior captains or majors, with little or no advanced flight qualifications. Squadrons will be challenged to meet the requisite quota of Air Combat Tactics Instructors (ACTI), division leads, mission commanders, and other instructor qualifications.⁴

Aircraft Inventory

Marine F/A-18s are anywhere from 13 to 20 years old and are approaching, if not surpassed, their original flight hour service life. The demand the GWOT has placed on the Hornet has exacerbated the situation. According to the Office of the Deputy Commandant of Aviation, "one [Hornet squadron] committed to GWOT uses [an equivalent of] 3.5 years of aircraft life" for each F/A-18D deployed.⁵ These squadrons' D-model Hornets will reach their service life 343% faster than at the normal rate.^{6 7} These

⁴ Department of the Navy, "FA-18 Training and Readiness Manual," NAVMC DIR 3500.107, May 25, 2006, pgs 8, 10, 17, 19.

⁵ Walsh, *Marine Aviation Update*, slide 5.

⁶ Ibid.

"significant service life challenges" have led to the development of the Service Life Management Program (SLMP), whereby the fleet can still meet "readiness goals while preserving these aircraft until the transition to the F-35 Joint Strike Fighter (JSF) is completed."⁸

Though the Hornet community will eventually become the JSF community, the problem is that the JSF Program has been delayed and Hornet squadrons will not begin transitioning to the JSF until 2012.⁹ This will require the SLMP to extend the Hornet service life goal from 6,000 hours to 10,000-12,000 hours; in so doing, the Marine Corps will have to pay \$2.5M for each of 433 center-barrel replacements,¹⁰ an intensive airframe restoration. Not only will the Marine Corps invest over \$1.08B to keep Hornets flying, but the number of aircraft requiring depot-level rework, combined with the long maintenance turn-time, will drastically reduce the "Hornet inventory to a level below that required to support the existing force structure."¹¹

⁷ As of 2008, F/A-18C Hornets will deploy to OIF; over the next several deployment cycles, the F/A-18C will encounter the same stresses as the F/A-18D.

⁸ DC(A), *2007 Marine Aviation Plan*, 6-3.

⁹ *Ibid.*, 3-8.

¹⁰ Walsh, *Marine Aviation Update*, slide 42 notes.

¹¹ David Axe, "Navy and Marine Corps Fighter Squadrons Face Shortfalls," *National Defense*, August 2006.

By mid-2008, the Marine Corps will have completed the stand-down of four fleet squadrons,¹² thereby reducing the number of fleet aircrew billets to compensate for the reduction in the Hornet inventory. Reducing the number of billets equals a loss of valuable experience, proficiency, and leadership in the fleet. As surplus aircrew rotate back into the cockpit, the Marine Corps must train them to the fleet standard again. Excess refresher training ties-up squadron resources and delays the squadron from achieving higher levels of proficiency. Tying-up resources, which are already limited, encumber Hornet aviators fleet-wide from achieving readiness levels necessary to challenge threats on and over the next battlefield.

Unrealistic Training

Range restrictions are constraints that Hornet aircrew must contend with. Range restrictions include: Nighttime flight and noise abatement limitations, ordnance and attack geometry restrictions, and environmental regulations.¹³ For example, Hornet aircrew stationed at MCAS Iwakuni lack

¹² These squadrons include two active duty and two reserve squadrons, possibly reinstating two of them around 2011.

¹³ Dan Burton, "Threats to Armed Forces Readiness," *Congressional Testimony to House of Representatives Committee on Government Reform*, May 16, 2002.

live-ordnance ranges in and around the Japanese mainland. Instead, aircrew must practice air-to-ground missions doing "simulated drops," without live or inert ordnance, in an airspace 30 miles north of Iwakuni. Furthermore, the host government restricts aircraft from flying after 2200, reducing the flight window for night flying practice. Korea has the nearest live-fire ranges, but they are 250 to 300 miles from Iwakuni. Not only does this distance inhibit training on a regular basis,¹⁴ but also aircrew are restricted from flying after 2200 again, limited to employing certain types of munitions, and forced to adhere to strict delivery parameters.

These constraints force aviators to develop "workarounds—or adjustments to the training event—that sometimes breed bad habits that could affect performance in combat."¹⁵ Moreover, they create an unrealistic, inflexible training environment, limiting aircrew development of the

¹⁴ Fuel considerations, driven by range proximity, would force aircraft using this range to either require in-flight refueling support or land in Korea before returning to Iwakuni. Both of which increase the complexity in mission planning, aircraft maintenance, and logistics planning.

¹⁵ Government Accounting Office, "Military Training: Limitations Exist Overseas but Are Not Reflected in Readiness Reporting: GAO-02-525," *GAO Reports*, April 30, 2002, 2.

"tactical judgment and initiative" required of aviators in combat, both now and in the future.¹⁶

Large-force exercises (LFEs) are training missions consisting of multiple divisions of aircraft,¹⁷ adversary aircraft support, air refueling support, electronic warfare, suppression of enemy air defense, and command and control. Participants conduct rigorous mission planning, mass briefing and debriefing. The intent of an LFE is to simulate as close to a combat scenario as possible.

For the past several years, squadrons have not put much emphasis on conducting LFEs: While pilots of F/A-18A/C squadrons may have only seen five to seven LFEs during their first tour, some aircrew in F/A-18D squadrons, because of frequent deployments supporting the GWOT, may not have seen any LFEs since their tour began.¹⁸ The lack of participation in LFEs removes valuable training from combat aviators; they do not gain the experience, confidence, situational awareness, and flight leadership associated with detailed integration among other aircrew, aircraft, and supporting agencies. Aviators become less competitive with their future adversaries.

¹⁶ Thomas D. Waldhauser, "Threats to Armed Forces Readiness," *Congressional Testimony to House of Representatives Committee on Government Reform*, May 16, 2002.

¹⁷ Division: flight of 4 aircraft. LFEs will generally involve 10+ aircraft, usually of various Type/Model/Series and military services.

¹⁸ Scott D. Schoeman, e-mail message to author, December 31, 2007.

The Next Step

To correct the deficiencies in squadron manning, aircraft inventory, and unrealistic training, the Marine Corps must make several changes. These changes include altering squadron manpower doctrine, rethinking the aircraft acquisitions process, leveraging political influence to gain required training assets, and shifting the training mentality at the squadron level.

Squadron Manning. Marine aviators should serve four to five years during their first squadron tour. Increasing the squadron tour length may require reducing the total number of Hornet aviators in the Marine Corps. Reducing the number of aviators will prevent a manpower "log jam" for the new aircrew completing Fleet Replacement Squadron training. Especially with the Marine Corps' 202K End Strength Increase,¹⁹ a greater influx of junior aviators joining the fleet will occur.

The Marine Corps "should take into account that a pilot must master his or her specialty before moving on to school or the battalion as their forward air controller,"²⁰

¹⁹ 202K End Strength Increase: Due to the GWOT and high deployment rate of Marines in the current force structure, CMC plans to increase personnel to 202,000 Marines by 2011 to lower individual deployment rates and meet the needs of USMC in the future.

²⁰ Lee, "Retaining Our Fixed-wing Pilots," 64.

to include IA billets and Transition Teams. By flying consistently for four to five years, Hornet aircrew will increase their tactical prowess, earn advanced flight qualifications, and contribute to squadron core competency and readiness. However, if the needs of the service justify taking aircrew out of the squadron to fulfill a much-needed billet elsewhere, the Marine Corps should reimburse the aircrew by extending their squadron tour equal to the time lost.

Aircraft Inventory. To alleviate the strain of its aging Hornet fleet on the operating forces, the Marine Corps should purchase a limited number of F/A-18E/F Super Hornets.²¹ There will not be enough legacy Hornet models to support the TACAIR infrastructure until the JSF transition. When the Marine Corps receives its first allotment of JSF, it still must support its remaining Hornet fleet.²² Even worse, "any [delays] in the JSF exacerbates any problems [the Marine Corps has] with aircraft shortages..."²³ Instead of tolerating the imminent loss of serviceable Hornets, the Marine Corps should bridge the gap by investing in Super

²¹ When compared to the legacy Hornet (F/A-18A/B/C/D), the Super Hornet (F/A-18E/F) is newer (IOC 2001), has an upgraded EW Suite, carries a larger payload, and has an increased survivability.

²² DC(A), *2007 Marine Aviation Plan*, 3-8.

²³ Geoff Fein, "Aircraft Reliability, Missions, And Schedule Significant Issues For Marine Corps," *Defense Daily*, July 18, 2006, 1.

Hornets to maintain a high, not just tolerable, level of readiness for the Hornet community in the future.

Unrealistic Training. Marine Corps leaders must ensure the Hornet community conducts realistic and unhindered training within accessible training ranges both stateside and while deployed. Ensuring this requires lobbying Congress and negotiating with host governments to reduce the restrictions on current training ranges.²⁴

Squadrons, on the other hand, must plan and execute more LFEs. Though unit-level and part-task training are the basics to combat proficiency, LFEs will provide the most realistic example of how missions will be conducted at the outset of a future campaign.

Counterarguments

One can argue that any future confrontation is irrelevant if the Marine Corps does not completely commit to, and win, today's fight—the Global War on Terror. Though the GWOT will be a battle fought for years—perhaps decades, the emergence of a new threat can happen within days. By the time Marines deploy to meet such a threat, it will be too late for the Hornet community to fight without

²⁴ Government Accounting Office, "Military Training," 3.

assuming excessive risk to aircrew, aircraft, and Marines on the ground because it was not able to prepare for future confrontation. The Marine Corps must be forward thinking; though currently engaged, it must continue to evolve.

This evolution must include the Hornet community if the Marine Corps wishes to defeat a future enemy. Hornet squadrons must be manned more effectively. The combination of the 202K personnel increase, reduction in Hornet aircraft inventory, and four less squadrons will create significantly more aircrew than squadron billets available. At first glance, the Marine Corps sees it has plenty of fresh aircrew to place into a few squadron billets, but fresh does not equal proficient. By the time it is a pilot's time to return to the cockpit, he is far from proficient, and his advanced qualifications, if any, might have expired.

Aircraft inventory must meet the demand of unrestricted training and combat. To do so, the Marine Corps should purchase a limited number of Super Hornets. One could argue "why would [the Corps] introduce an aircraft tied to a long runway when [it is] looking to become more expeditionary over time?"²⁵ Gradually, the Hornet community will become the JSF community, but the

²⁵ Fein, "Aircraft Reliability," 1.

Marines will not have a pure JSF fleet until 2023, with the lowest levels of TACAIR aircraft occurring between 2012 and 2019.²⁶ The Marine Corps cannot accept seven years of diminished inventory and readiness and still be expected to match potential adversaries that possess capabilities to exploit this vulnerability.

Conclusion

To remain tactically relevant, the Marine Corps must avoid the pitfall of investing all training focus toward today's battles. Such preoccupation does not preclude the possibility for the Marine Corps to be called upon to meet a future regional threat. One can speculate whom that threat might be, but whoever it is, the Hornet community is not as prepared as it must be to fight its next foe. Though Hornet aircrew have excelled in the present counterinsurgency fight, a conventional war has been something for which they are out of practice in fighting. Correcting deficiencies in squadron manning, aircraft inventory, and unrealistic training will enable the Marine Corps to equip its Hornet community for success in the next fight.

1994 words

²⁶ Walsh, *Marine Aviation Update*, slide 28.

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